Cognitive-Behavioral Therapies for Trauma

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A Contextual Analysis of Trauma

THEORETICAL CONSIDERATIONS

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While trauma researchers have emerged from a variety of psychological paradigms, behaviorists have played an important role in defining the field. Behavioral therapy (BT) is particularly well suited to the treatment of stress reactions. Many of its treatment methods were originally fashioned as a response to problems of fear and anxiety. The theoretical underpinnings of BT were developed, in part, through the application of models of classical conditioning and operant learning to situations in which exposure to aversive stimuli generated fear, escape, and avoidance responses. With a tradition of careful attention to anxiety and its disorders, it is natural that behavioral practitioners and researchers have increasingly brought to bear their clinical and theoretical insights on the domain of trauma and its consequences.

The chapters that make up this volume describe a range of behavioral and cognitive-behavioral approaches to problems associated with traumatization. They represent the views of a diverse group of practitioners and researchers who concern themselves with different survivor populations. While there are some differences in the authors' conceptualizations of the behavioral models and treatment methods, there are a number of common factors that unite this work. While it is not our goal to provide a unitary definition of cognitive-behavioral therapy, we are interested in highlighting the similarities of the points of view of the authors in this text. There remain many misconceptions associated with more current behavioral theory. For example, contemporary forms of BT incorporate both observable behaviors and private events such as thoughts and feelings. In order to be clear that the work described here includes both private and observ-

able behaviors, we use the term "cognitive-behavioral therapy" (CBT) to describe the treatments presented in this text. This is also consistent with other contemporary behavioral approaches (e.g., Linehan, 1993; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Additionally, we argue for an ecological approach to trauma and its consequences that encompasses developing contextual forms of CBT. Finally, we raise several issues of importance for future research. The importance of the recursive loop connecting science and practice is a long tradition in behavioral therapies. While this text focuses on current aspects of applied work with trauma survivors, the interplay of science and practice continues to move the technology forward.

There are a number of principles and philosophical assumptions associated with a contextual behavioral approach (Hayes, Follette, & Follette, 1995). However, of primary importance is the idea that behavior is best understood in terms of its function rather than its form. This concept is more fully elaborated in the Naugle and Follette chapter that describes a functional analytic approach to treating problems associated with trauma. While many of the chapters in this text are consistent with a traditional syndromal classification, typically posttraumatic stress disorder (PTSD), our conceptualization moves beyond that construct. Syndromal classification has provided some direction for treatment development, particularly with regard to anxiety disorders. However, a contextual behavioral approach moves away from traditional classification, in order to more fully understand the behaviors in their context. We argue that an analysis of the issues bringing any client to treatment should include both distal and proximal variables. For example, in the case of childhood trauma, it is important to investigate a wide range of childhood experiences (physical and sexual abuse, family environment, and positive support) as well as current stressors (couples' problems or job stress) that may have an impact on current functioning (Polusny & Follette, 1995). Thus, the treatment proposed in this text emphasizes an inclusive approach, with attention to not only the trauma, but also to a number of variables that may mediate or moderate adult outcomes.

THEORETICAL ISSUES IN COGNITIVE-BEHAVIORAL APPROACHES TO TRAUMA

Multiple Theoretical Perspectives on Trauma

As the field of behavioral therapy has evolved, it has generated a large number of both broad and specific theories (O'Donohue & Krasner, 1995) that sometimes complement one another and sometimes compete for explanatory relevance. Indeed, there has been much debate about whether such a range of theoretical formulations can or should be accommodated under a single rubric of "behavioral therapy" or "cognitive-behavioral therapy," when alternative formulations some-

times do violence to the core assumptions and conceptual underpinnings of one another. With the growth in trauma-related cognitive-behavioral research and treatment, these same controversies are present. However, we believe there is some movement toward a rapprochement among these differing perspectives.

Learning Theory

Theories of classical and operant learning provide important conceptual grounding for clinical scientists working in the trauma area. Behavioral treatments have developed from learning theory, with two traditions evolving from the basic discipline. While applied behavior analysts and behavioral therapists shared a belief in a number of basic principles, they also became part of traditions that increasingly diverged in both theory and practice (Hayes et al., 1995). However their interest in the science of behavior based on learning principles held them together under the basic umbrella of the BT movement.

Models of classical conditioning have provided the central idea that stimuli associated with traumatic events can, through learning, come to elicit responses similar to those shown during exposure to trauma itself. Trauma-related behaviors and symptoms—for example, intrusive thoughts and images, fear-related physiological changes, aggression, hypervigilance, or problematic interpersonal behaviors—may then occur in situations in which no further traumatic exposure occurs. Through this mechanism, then, the spread of traumatic reactions to the domains of ordinary life can be explained. This fundamental understanding of trauma and learning has led to a central tenet of much of the therapy discussed in this text—the importance of exposure in treating trauma.

Theories of operant learning direct attention to the factors that maintain apparently maladaptive responding, and the processes of reinforcement that continue to affect behavior. According to this way of thinking, many of the behaviors shown by trauma survivors—avoidance, social isolation, aggression, dissociative responding—are in part maintained by their emotional, social, and environmental consequences. Treatment implications include the need to alter the consequences of problematic behaviors, teach different ways of achieving desired outcomes, and arrange for reinforcement of alternative responses.

Mowrer's (1960) two-factor theory as it relates to problems associated with anxiety provides a strong foundation for understanding trauma symptoms. The theory suggests that classical conditioning explains basic fear acquisition and that avoidance behavior is maintained through operant conditioning. This integration of the two learning paradigms provides a more comprehensive explanation of trauma-related symptoms. The pairing of of the aversive or unconditioned stimulus (UCS) with the neutral (condtioned) stimulus (CS) will elicit fear responses. For example, some survivors of sexual abuse report that the perpetrator smelled of alcohol during the abuse experiences and that now the smell of acohol elicits a fear response. Fears are maintained through avoidance, which is negatively rein-

forced. This lack of exposure to the CS prevents new learning from taking place, hence the fears are maintained. One example of this mechanism observed in abuse survivors is avoidance of intimate relationships. This analysis of anxiety disorders led to the proposal that exposure therapies be used for trauma survivors. The exposure principle is a recurrent theme in this text and continues to provide a foundation for BT and CBT.

Cognitive Perspectives

In the 1960s, cognitive science emerged as an important discipline in experimental psychology and set the stage for significant transitions in behavioral therapy. These approaches were less concerned with external environmental influences on behavior, and more focused on reaching inside the "black box" to describe and label internal processes, using constructs such as "belief," "attitude," "memory," "schema," and "semantic network." A variety of mediators were identified that were used in creating connections between the organism and the environment.

One type of cognitive approach is concerned with identification of common negative beliefs or "self-talk." This cognitive content-oriented approach emphasizes the role of negative beliefs in causing distress and helping to maintain symptoms, with anxiety disorders as a primary exemplar of this process. Beliefs emphasized include those related to personal safety or vulnerability, dangerousness of the world, lessened trust in others, loss of confidence in the fairness and benevolence of the world, self-blame and guilt, low self-efficacy or perceived self-competence, negative future outcome expectancies, low self-worth or esteem, and loss of spiritual beliefs. One practical outgrowth of this orientation is the application of cognitive restructuring methods to challenge overly negative or distorted interpretations of traumatic experiences.

A second conceptual stream applies the semantic network model of internal memory structure to traumatization (Lang, 1979; Foa, Steketee, & Rothbaum, 1989; Foa & Rothbaum, 1998). According to these accounts, traumatic experiences lead to the development of fear structures in memory, which require therapeutic modification. In order for this modification to occur, two conditions must be met: Fear structures must be "activated," and new information must be incorporated. This model directs attention to the importance of actively accessing trauma-related cognitive processes if they are to be changed. It has been used to provide a theoretical understanding of the utility of treatment via direct therapeutic exposure, and to conceptualize factors that disrupt "emotional processing" (Foa, Riggs, Massie, & Yarczower, 1995).

A third view focuses on the personal accounts that individuals give of their experience and its consequences: their trauma "narratives" (Meichenbaum & Fong, 1993). Rather than focusing attention on single classes of negative thoughts, it draws attention to the importance of the narrative as a whole, and to narrative change across repeated tellings. Importantly, it is also beginning to prompt

development of a set of novel measures of therapeutic change. Recently, it has been shown that changes in narrative structure are correlated with PTSD symptom change (Foa, Molnar, & Cashman, 1995; Foa, 1997).

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Finally, the experimental psychological methodologies and models of "cognitive science" have increasingly been brought to bear on the phenomena of traumatization. Researchers have studied processes of attention (e.g., Thrasher, Dalgleish, & Yule, 1994) and subliminal processing of threat cues (e.g., McNally, Amir, & Lipke, 1996). A variety of aspects of memory in trauma survivors has begun to receive research attention, including autobiographical memory (McNally, Litz, Prassas, Shin, & Weathers, 1994), implicit and explicit memory (e.g., McNally, 1997), performance on "directed forgetting" tasks (e.g., Cloitre, Cancienne, Brodsky, Dulit, & Perry, 1996), and source monitoring (e.g., Golier, Harvey, Steiner, & Yehuda, 1997). Some of this work has implications for the understanding of processes responsible for effective and ineffective treatment using behavioral methods. For example, Brewin, Dalgleish, and Joseph (1996) used recent models of memory and emotion processing to conceptualize three types of outcome resulting from efforts to cope with traumatic memories and emotions: completion/integration, chronic emotional processing, and premature inhibition of processing. So far, these approaches have had more impact on theory than on treatment design and effectiveness. However, they offer the promise of development of relatively "nonreactive" trauma-related assessment tools, methods of measuring PTSD that do not rely solely on self-reported symptoms and therefore are less subject to effects of mood, motivation, and malingering or compensation seeking. They provide novel, methodologically sound assessment technologies linked with larger bodies of cognitive sciences research. And they link the psychology of trauma with current developments in experimental psychology.

The working models of most cognitive-behavioral theoreticians would incorporate multiple aspects of the various learning and cognitive conceptualizations outlined here. For instance, the cognitive reprocessing treatment designed by Resick and her colleagues (Resick & Schnicke, 1993) incorporates learning theoretical conceptualizations and cognitive restructuring methods. As the emotion processing model developed by Foa and her colleagues has evolved, it has embraced elements of learning theory, internal memory structures, cognitive content specific to PTSD, and the narrative perspective (Foa, Molnar, & Cashman, 1995).

Behavioral Analysis and Cognitive-Behavioral Therapy

We hope that one unique contribution of this book is to help increase the mutual influence of behavior analysis and mainstream BT. With the "cognitivization" of BT, there has been an increased awareness of the influence of cognitive processes on behavior, and the development of treatment methods with a distinctly cogni-

tive focus. Within the various approaches to trauma treatment, practitioners and theorists have paid more attention to the "inner" world of their client, to the subjective meanings of traumatization, to internal "fear structures" (Foa, Steketee, & Rothbaum, 1989), to schemas, beliefs, and attitudinal "stuck points" (Resick & Schnicke, 1993). By contrast, behavior analysts have traditionally directed attention to the external influences on behavior, to the social influences on symptoms, and attempts at coping. They remind us that the people with whom survivors interact—their "significant others," families, peers, coworkers, treatment providers, and their culture-combine to help shape responses to trauma. The behavioral analytic framework also teaches that, as with other complex sets of behaviors, the sequelae of traumatization are many and varied, differing across individuals and in their relationships to one another. It challenges the very concept of "syndrome" (Krasner, 1992), and indeed, of "posttraumatic stress disorder." PTSD as a syndrome of trauma is seen as a classification imposed by human observers. Syndromal classification in DSM-IV is viewed as an analytic approach with distinct limitations. For example, the link between disorders and differential treatment is weak (Hayes, Nelson, & Jarrett, 1987), and problems subsumed under the same category (e.g., depression) may be caused or maintained by very different variables (Naugle & Follette, Chapter 3, this volume). Thus, the inclusion of the behavioral analytic approach elaborates and strengthens a repertoire for evaluating the various responses to trauma.

TOWARD A CONTEXTUAL-ECOLOGICAL PERSPECTIVE ON TRAUMA

Although a perusal of the contents of this text reflects a focus on the intrapersonal sequelae associated with traumatic experiences, we believe that the symptoms and problems discussed must be considered in terms of the broader contexts in which they occur. Bronfenbrenner (1979) has described an ecological approach to human development that is useful in explicating the many interconnected systems in which the individual is embedded. A consideration of these systems leads to a more thorough understanding not only of the reasons for the development and maintenance of symptomatic behaviors, but also identification of targets for intervention.

Our perspective includes a contextual analysis of both observable and nonobservable behaviors (Hayes, Follette, & Follette, 1991). In this analysis, behaviors are conceptualized in terms of their functions and not simply their topographies. These functions are assessed in terms of both historical and situational factors, with a concurrent examination of multiple layers of systems. Both systems with which the individual is in direct contact and those that are outside of the individual's direct contact are assessed. This analysis includes distal and proximal variables from a number of contexts. Thus, the trauma survivor who is having difficulties in an intimate relationship is considered not only in terms of intrapersonal behavioral deficits, such as intimacy-avoidant behaviors, but also in

terms of the context of variables in the couple relationship. Relationships are considered as a reciprocal interchange of behaviors that can only be clearly understood using a contextual analysis. Moreover, extrafamilial systems, such as work environment, treatment facilities, and friendship networks also impact upon the traumatized individual. At yet a higher level of analysis is the sociocultural context in which all of the other systems are embedded. Using this framework, dysfunction is examined not only within the individual, but also between and within other systems at other levels.

Interpersonal Contexts of Traumatization

As noted earlier, the people with whom trauma survivors interact influence them. Social situations provide many of the "trauma reminders" or stimuli that elicit or prompt symptoms and problem behaviors. It is in social environments that traumatized persons attempt to cope with the effects of their experience by talking with family or friends, participating in support groups, or seeking professional help from physicians or mental health professionals. Cognitions about trauma and its implications are usually expressed in interpersonal contexts, through the descriptions given to helpers and significant others in conversation and to researchers via self-report measures. Disclosure of traumatic experience, which has been hypothesized to engender healing processes of exposure, cognitive restructuring, and social support, also is an essentially interpersonal event.

Understanding environmental factors, particularly those of "invalidating environments" (Linehan, 1993), provides a broader terrain for the completion of the functional analysis. As described by Linehan an invalidating environment is one in which an individual's expression of his or her private experience is responded to with "erratic, inappropriate, and extreme responses" (p. 49). For example, a sexual abuse survivor may disclose aspects of her abuse experiences to her significant other in an attempt to seek validation and understanding. If her partner vacillates between expressions of sadness and anger, becomes frustrated with his lack of ability to remedy the situation, and tells her "Just forget it" and get on with her life, this reaction could lead to continuing avoidance of closeness with the partner. It could also lead to increasing emotional avoidance at both an internal and public level. Trauma survivors with such experiences may invalidate their own interpretations of experience and become more distrustful not only of their environment, but also of themselves. In the clinical situation described here, an attention to the posttrauma interpersonal context suggests targets for change and intervention strategies distinct from those emerging from an exclusive focus on the symptoms, thoughts, and feelings of the survivor.

Larger Environmental Contexts of Traumatization

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Invalidation need not occur only at an interpersonal level. Vietnam War veterans who would now be considered to be suffering from symptoms of PTSD often had

punishing experiences when seeking help in hospitals: They were considered psychotic, placed on inappropriate medications, or even suspected of malingering. Many veterans were denied or had great difficulty in qualifying for compensation in the days before PTSD became a formal psychiatric diagnosis included in the DSM. These experiences confirmed for some veterans their more broad distrust of all government agencies, based on experiences in the military. On yet another front, as veterans can well describe, a significant part of the pain for many of them was related to the anger and hostility they experienced upon coming home. The nation's strong ambivalent feelings about the war were often directed at the veterans themselves, thereby exacerbating the strangeness of returning to civilian life.

Issues of gender, ethnic minority membership, and aging have become important considerations in the developing literature on trauma, and the field of clinical behavior therapy has not ignored these large-scale influences on the treatment experiences offered trauma survivors. As mentioned earlier, Linehan and Foa and colleagues have attempted to incorporate the broad social environment into their models dealing with repeated victimization of women. Insidious traumatization-everyday slights, discrimination, and even explicit epithetsappear to arise from simply occupying a lower social class, having less power or status, characteristic of American minorities and women. These chronic stressors have a broad demoralizing effect upon the trauma victim, and each small instance, though often unnoticed or unmeasured, takes its psychological toll on the individual. A practical, behavioral stance in therapy might require sharing a philosophical approach with the patients (e.g., a "wise mind" would take into account the offense through a balanced understanding of the emotional hurt along with the rational "weighing" of its meaning). In combination with the more familiar strategies of assertiveness training and increasing positive activities, authors herein discuss explicit efficacy and control-enhancing interventions.

As yet another example, the mass media, with their depiction of traumatic events and the experiences of survivors, may also be an important larger context for the understanding of traumatization and its consequences. For example, violent injury is an all-too-common fixture of television programming. However, injured parties usually adapt instantly to their wounding with no apparent psychological effects. Actors, despite exposure to life-threatening events—shootings, stabbings, attempted kidnappings and assaults, natural disasters—routinely carry on as if normal response to such events includes only brief distress and few implications for the future. Such coverage distorts public awareness of the consequences of violence and other forms of tramatization. In so doing, it helps create a social climate in which victims are surprised by the intensity of their reactions, families may lack sympathy for a member with chronic problems, and health care systems may fail to routinely address the psychosocial needs of injured patients (Ruzek & Garay, 1996).

The Contexts of Treatment

One of the consequences of a contextual or ecological perspective is an increased awareness that both theories of traumatization and therapist behaviors (and, indeed, treatment systems themselves) are part of the larger environment in which a trauma survivor must adapt. Kohlenberg and Tsai (Chapter 12, this volume) bring this issue to the forefront. Their examination of clinically relevant behaviors occurring in the session provides a unique addition to a behavioral approach to treatment. Additionally, it is important to realize that treatment is almost without exception conducted in the context of a "medical model" of human difficulties and service delivery (Krasner, 1992). Within this context, posttrauma problems are conceptualized as medical "disorders" that are treated by "mental health" specialists, often in hospitals or other medical settings. We are so thoroughly embedded in this context that it is sometimes difficult to recognize it as such, and to remember that many alternative models are in fact possible. Nonetheless, the model has consequences, including the stigmatization that may be associated with the seeking of "treatment" for a "mental health" problem, the reification of the posttrauma problems into a posttraumatic stress "disorder," and the pragmatic constraints on treatment delivery imposed by the model itself. For example, treatment is often (rather unreflectively) delivered in 50-minute blocks, in an environment far removed from that normally encountered by the client. This mode of service delivery is unlikely to be optimal for change.

The notion that alcoholism is a "disease" has been held to reduce the stigma associated with entry into treatment. Similarly, PTSD has been much described as a "normal response to abnormal circumstances," partly with the intention of directing attention to the primacy of extreme stress and not individual differences in determining response. However, research indicates that many people do not in fact develop PTSD following trauma exposure, and therefore PTSD is not "normal" (Yehuda & McFarlane, 1995). Will increased public and professional awareness of this finding create a different societal situation for the trauma survivor, in which the likelihood of viewing posttrauma problems as psychopathologies of the individual ("blaming the victim") increases? Rather, we hope that a dialectic emerges that encompasses both healthy, adaptive responses and more symptomatic responses to trauma as normal.

SOME FUTURE PRIORITIES FOR TRAUMA-RELATED COGNITIVE-BEHAVIORAL THERAPY

Consistent with its history of empirical evaluation, cognitive-behavioral treatment methods for stress-related responses to trauma and other consequences of traumatization have been tested in more controlled outcome studies than other treatment procedures (Foa & Meadows, 1997). As treatments for survivors of

trauma develop, it will be important to increasingly target specific problems, which have as yet received little attention. Often, the syndrome of responding called PTSD has been targeted globally. Intervention is delivered and changes in aggregate levels of symptomatology are measured. One strength of a cognitive-behavioral perspective has been its specificity of intent; with treatment elements that have been designed to affect specific aspects of responding. Future studies should tackle problems that have been difficult to change, such as emotional numbing (Litz, 1992). They should investigate and measure clinically significant behaviors that have not been included in outcome studies. They should target trauma-related problems that have been largely ignored by cognitive-behavioral practitioners and theorists.

Second, there is a clear need for increased effort to develop prevention and early intervention services targeted at recently traumatized populations. Foa, Hearst-Ikeda, and Perry (1995) provided a demonstration that a cognitive-behavioral early intervention service comprised of education, stress management, direct therapeutic exposure, and cognitive restructuring could prevent development of chronic PTSD in rape victims. Similar efforts targeted at other trauma populations are much needed.

Finally, there is a dearth of empirically tested cognitive-behavioral treatments designed for traumatized children. CBT methods have much to offer in the development of preventive interventions and treatments for traumatized children (e.g., Peterson & Brown, 1994; Peterson, Gable, Doyle, & Ewigman, 1997), but to date, their contribution remains largely unrealized. An important early step is the treatment approach developed and tested by Deblinger and Heflin (1996) for sexually abused children and their nonoffending parents.

Finally, we are very optimistic regarding the contributions of behavioral therapies to the general field of trauma research and therapy. A behavioral approach has the advantage of focussing on a number of responses to trauma, with the understanding that no symptoms are pathognomonic of a trauma history. Symptoms are best understood in terms of their current functions, rather than solely as a consequence of events of the distant past. Behavioral analyses of responses to trauma have yet another advantage. Behavioral responses to trauma are seen as perfectly understandable when analyzed functionally. Thus, a behavioral approach is inherently respectful of people, with a nonblaming approach applied to the analyses of behavioral repertoires. In closing, we would propose that the analyses of problems associated with trauma histories should not just occur at the level of the individual. Instead, as scientists and practitioners, it is incumbent upon us to intervene at higher systems levels. While trauma will never be eliminated from the human experience, the incidence of some types of trauma (i.e., perpetration of violence against particularly vulnerable groups such as women and children) can be greatly reduced with the implementation of prevention strategies.

REFERENCES

- Brewin, C. R., Dalgleish, T., & Joseph, S. (1996). A dual representation theory of posttraumatic stress disorder. *Psychological Review*, 103, 670–686.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Cloitre, M., Cancienne, J., Brodsky, B., Dulit, R., & Perry, S. W. (1996). Memory performance among women with parental abuse histories: Enhanced directed forgetting or directed remembering? *Journal of Abnormal Psychology*, 105, 204–211.
- Deblinger, E., & Heflin, A. H. (1996). Treating sexually abused children and their nonof-fending parents. Thousand Oaks, CA: Sage.
- Foa, E. B. (1997). Psychological processes related to recovery from a trauma and an effective treatment for PTSD. Annals of the New York Academy of Sciences, 821, 410-424.
- Foa, E. B., Hearst-Ikeda, D. E., & Perry, K. J. (1995). Evaluation of a brief cognitive-behavioral program for the prevention of chronic PTSD in recent assault victims. *Journal of Consulting and Clinical Psychology*, 63, 948–955.
- Foa, E. B., & Meadows, E. A. (1997). Psychosocial treatments for posttraumatic stress disorder: A critical review. *Annual Review of Psychology*, 48, 449–480.
- Foa, E. B., Molnar, C., & Cashman, L. (1995). Change in rape narratives during exposure therapy for PTSD. *Journal of Traumatic Stress*, *8*, 675–690.
- Foa, E. B., Riggs, D. S., Massie, E. D., & Yarczower, M. (1995). The impact of fear activation and anger on the efficacy of exposure treatment for PTSD. *Behavior Therapy*, 26, 487–499.
- Foa, E. B., & Rothbaum, B. O. (1998). Treating the trauma of rape: Cognitive-behavioral therapy for PTSD. New York: Guilford Press.
- Foa, E. B., Steketee, G., & Rothbaum, B. O. (1989). Behavioral/cognitive conceptualization of posttraumatic stress disorder. *Behavior Therapy*, 20, 155–176.
- Golier, J., Harvey, P., Steiner, A., & Yehuda, R. (1997). Source monitoring in PTSD. Annals of the New York Academy of Sciences, 821, 472-475.
- Hayes, S. C., Follette, W. C., & Follette, V. M. (1995). Behavior therapy: A contextual approach. In A. S. Gurman & S. B. Messer (Eds.), *Essential psychotherapies: Theory and practice* (pp. 128–181). New York: Guilford Press.
- Hayes, S. C., Nelson, R. O., & Jarrett, R. (1987). Treatment utility of assessment: A functional approach to evaluating the quality of assessment. *American Psychologist*, 42, 963–974.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Emotional avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, 64, 1152–1168.
- Krasner, L. (1992). The concepts of syndrome and functional analysis: Compatible or incompatible. *Behavioral Assessment*, 14, 307–321.
- Lang, P. J. (1979). A bio-informational theory of emotional imagery. *Psychophysiology*, 6, 495–511.
- Linehan (1993). Cognitive-behavioral treatment of borderline personality disorder. New York: Guilford Press.

- Litz, B. T. (1992). Emotional numbing in combat-related post-traumatic stress disorder: A critical review and reformulation. *Clinical Psychology Review*, *12*, 417–432.
- McNally, R. J. (1997). Implicit and explicit memory for trauma-related information in PTSD. *Annals of the New York Academy of Sciences*, 821, 219–224.
- McNally, R. J., Amir, N., & Lipke, H. J. (1996). Subliminal processing of threat cues in posttraumatic stress disorder? *Journal of Anxiety Disorders, 10,* 115–128.
- McNally, R. J., Litz, B. T., Prassas, A., Shin, L. M., & Weathers, F. W. (1994). Emotional priming of autobiographical memory in post-traumatic stress disorder. *Cognition and Emotion*, 8, 351–368.
- Meichenbaum, D., & Fong, G. (1993). How individuals control their own minds: A constructive narrative perspective. In D. M. Wegner & J. W. Pennebaker (Eds.), *Handbook of mental control* (pp. 473–489). New York: Prentice-Hall.
- Mowrer, O. H. (1960). Learning theory and behavior. New York: Wiley.
- O'Donohue, W., & Krasner, L. (Eds.). (1995). Theories of behavior therapy: Exploring behavior change. Washington, DC: American Psychological Association.
- Peterson, L., & Brown, D. (1994). Integrating child injury and abuse/neglect research: Common histories, etiologies, and solutions. *Psychological Bulletin*, 116, 293–315.
- Peterson, L., Gable, S., Doyle, C., & Ewigman, B. (1997). Beyond parenting skills: Battling barriers and building bonds to prevent child abuse and neglect. *Cognitive and Behavioral Practice*, 4, 53–74.
- Polusny, M. A., & Follette, V. M. (1995). Long-term correlates of child sexual abuse: Theory and review of the empirical literature. *Applied and Preventive Psychology*, *4*, 143–166.
- Resick, P. A., & Schnicke, M. K. (1993). Cognitive processing therapy for rape victims: A treatment manual. Newbury Park, CA: Sage.
- Ruzek, J. I., & Garay, K. (1996). Hospital trauma care and management of trauma-related psychological problems. *National Center for Post-Traumatic Stress Disorder Clinical Quarterly*, *6*, 87–90.
- Thrasher, S. M., Dalgleish, T., & Yule, W. (1994). Information processing in posttraumatic stress disorder. *Behaviour Research and Therapy*, 32, 247–254.
- Yehuda, R., & McFarlane, A. C. (1995). Conflict between current knowledge about PTSD and its original conceptual basis. *American Journal of Psychiatry*, 152, 1705–1713.